

<p>90-295017/39 A81 G03 (A18) KAPA 08.02.89 KANSAI PAINT KK 08.02.89-JP-028850 (17.08.90) C091-07/02 Water repellent pressure sensitive adhesive sheet - includes water repellent coating layer config. polymer of fluoroalkyl gp. config. (meth)acrylate monomer and opt. silicone C30-127464</p>	<p>A water repellent pressure sensitive adhesive sheet is a multi-layer sheet comprising (A) a water repellent coating layer, (B) a base sheet layer, (C) a pressure sensitive adhesive layer and (D) a releasing sheet layer, in which (A) comprises (a) polymer comprising fluoroalkyl gp config. (meth)acryl monomer of formula (I), opt. (b) silicone config. polymerisable unsatd. monomer of formula (II)</p> $\begin{array}{c} \text{R}_1 \text{ O} \\   \parallel \\ \text{CH}_2 = \text{C} - \text{C} - \text{O} - (\text{CH}_2)_1 - \text{Rf} \end{array} \quad (I)$ $\begin{array}{c} \text{R}_2 \\   \\ \text{CH}_2 = \text{C} - \text{R}_3 \end{array} \quad (II)$ <p><math>\text{R}_1, \text{R}_2 = \text{H}</math> or methyl; <math>1 = \text{integer of } 1-11</math>; <math>\text{Rf} = \text{C}_m\text{F}_{2m+1}</math>, or <math>-\text{C}_n\text{F}_{2n}\text{H}</math>, <math>m = \text{integer of } 1-20</math>,</p>
<p>A(4-E10D, 12-A1, 12-A5) G(2-A5D, 3-B4) <math>n = \text{integer of } 1-20</math>, <math>\text{R}_3 = \text{gp. of formula (I)}</math></p>	<p><math>j = 0</math> or <math>1</math>, <math>k = \text{integer of } 0-5</math>, <math>q = \text{integer of } 1-20</math>, <math>r = \text{integer of } 0-2</math>, <math>s = \text{integer of } 1-3</math>, and <math>r + s = 3</math>, and (c) particles of ave. dia. of at least <math>5\mu\text{m}</math>.</p> <p><u>USE/ADVANTAGE</u> The sheet prevents ice and snow adhesion on objects and involves only sticking the sheet instead of using a trouble-some coating operation.</p> <p><u>EXAMPLE</u> On the other side of a plasticized PVC sheet (B), a pressure sensitive adhesive layer (C) comprising mainly poly-2-ethylhexylacrylate was formed, on which a releasing agent J02208382-A+</p> $\left[ \begin{array}{c} \text{C} - \text{O} \\   \quad   \\ \text{O} \quad \text{H} \end{array} \right]_j - (\text{CH}_2)_k - \text{Si} \begin{array}{l} \text{C}_p\text{H}_{2p+1} \\ \text{OC}_q\text{H}_{2q+1} \end{array} \begin{array}{l} r \\ s \end{array} \quad (I)$

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layer (D) was formed. On the other side of (B) a primer layer (E) comprising mainly ethylcellulose was formed on which a water repellent layer (A) comprising (a) obtained by copolymerization of 2-perfluorooctylethylmethacrylate, 2-perfluorooctylmethacrylate,  $\gamma$ -methacryloyloxypropyltrimethoxysilane, in hexafluorometaxylene and (c) hydrophobic silica fine powder with other solvent was formed by spraying and drying to obtain the sheet. Contact angle of the surface was 138°. The sheet exhibited good weatherability, water proofness and flexural resistance. (9ppW11HWDwgNo0/0)

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